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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,547	03/31/2004	Richard Warren Hailey	014586-9013-00	7402
1131 7590 05/03/2007 MICHAEL BEST & FRIEDRICH LLP Two Prudential Plaza 180 North Stetson Avenue, Suite 2000 CHICAGO, IL 60601			EXAMINER FABER, DAVID	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/814,547

Applicant(s)

HAILEY ET AL.

Examiner

David Faber

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the Request for Continued Examination filed 21 February 2007.
2. Claims 1-7, 11, 14-16, and 28 have been amended.
3. Claims 1-30 are pending. Claims 1, 14-16, and 28 are independent claims.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 29 January 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The drawings were received on 21 February 2007. These drawings are not accepted.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "370" has been used to designate composition element, font element, field modifiers, and Field Table in FIG 22. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1, 12-13, 16-17, and 28-30 remain rejected under 35 U.S.C. 102(b) as being anticipated by Poole et al (US Patent #6,006,242, patented 12/21/1999).

As per independent claim 1, Poole et al discloses a method:

- establishing a software architecture (Column 2, lines 15-16, 41-48; Column 80, lines 22-23: Discloses the document construction "architecture" is software) where each rule in the set of rules is configured for a set of rules to be embedded in one or more computer processable documents, the documents consisting of a plurality of components, the set of rules of defining content to be included in the documents and (Column 5, lines 3-24; Column 7, lines 28-60: The document developer specifics content to be put into the final document in order to meet the objectives of the parties in a transaction and to meet certain business, legal, and/or government rules and regulations. Each of the constituent portions of the document is associated with an entity

reference wherein the references are checked to make sure they follow all business, legal, and government requirements (rules) which produces content fragments having integrity by virtue of being compliant with one or more business, legal, or government requirements. In other words, content included in the document follows all the required rules implemented that define the content that is to be placed into the document. Furthermore, as stated in Column 5, lines 3-24, and Column 7, lines 37-40, each document component is linked to a business government regulation source, wherein each content of the regulation is incorporated into a final by referencing its corresponding document content. (Col 7, lines 28-60) Since each of the content of the regulation is incorporated by referencing the document component into the final document, the regulations/rules are embedded into the documents which defines the content in the document.

- creating a dynamic document structure (FIG 1; Column 1, lines 15-20) that can resolve to one or more instances of a document (FIG 2, Column 5, lines 54-60) and that is configured to include one or more rules based on the architecture for the set of rules. (FIG 1; Column 5, lines 1-24)

As per dependent claim 12, Poole et al discloses a method:

- creating a static document structure that can be resolved into one or more instances of a document that includes at least some content that is determined before and some content that is unchanged during and after a

resolution process. (Column 18, line 56 – Column 19, line 11: Discloses creation about static documents, and how static documents are different than dynamic indicating static documents remain unchanged for many transactions) .

As per dependent claim 13, Poole et al discloses a method:

- providing a data set (Column 4, lines 54-56) configured to be processable by one or more rules built on the architecture for a set of rules (Column 6, line 34: rules that dictate the access and utilization of components; Claim 16)

As per independent claim 16, Claim 16 recites similar limitations as in Claim 1, and is similarly rejected under rationale. Furthermore, Poole et al discloses a method:

- creating a transaction data set; (Column 5, lines 3-7; Column 29, STEP 1: collecting transaction data by instantiating (or create) business objects.)
- retrieving one or more cross-referenced document components from a data base, the one or more document components configured to include one or more rules; (FIG 1, Column 5, lines 10-24; In addition, Column 7, lines 31-40 discloses a document may be defined from text and graphical components accessed from a Knowledge base. In addition, the Knowledge Base includes rules being stored. (Column 6, lines 15-30) Each of the constituent portions of the document is associated with an entity reference wherein the references are check to make sure they follow all business, legal, and government

requirements (rules) which produces content fragments having integrity by virtue of being compliant with one or more business, legal, or government requirements. In other words, content included in the document follows all the required rules implemented that define the content that is to be placed into the document. Furthermore, as stated in Column 5, lines 3-24, and Column 7, lines 37-40, each document component is linked to a business government regulation source, wherein each content of the regulation is incorporated into a final by referencing its corresponding document content. (Col 7, lines 28-60) Since each of the content of the regulation is incorporated by referencing the document component into the final document, the regulations/rules are embedded into the documents which defines the content in the document.)

- processing the one or more cross-referenced document components in a processor to generate a tree having a root node; processing the tree beginning at the root node; (Column 4, lines 6-16: parsing a document creates a tree wherein inherently a tree is created that contains at least one root node. After parsing and during validating, process inherently starts at top of the tree at the root and work its way down the tree.)
- when a rule is encountered, evaluating the rule and replacing it with a value; (Column 45, lines 18-27: rules are evaluated, and replaces rules with objects presenting a value)

As per dependent Claim 17, Poole et al discloses a method:

- establishing an architecture for a set of rules (Column 5, lines 1-10; FIG 1)

As per independent claim 28, Claim 28 recites similar limitations as in Claim 16 and is similarly rejected under Poole et al.

As per dependent claim 29, Claim 29 recites similar limitations as in Claim 17 and is similarly rejected under Poole et al.

As per dependent Claim 30, Claim 30 recites similar limitations as in Claim 18 and is rejected under rationale. Furthermore, Poole et al discloses establishing a list of data structures. (Column 4, lines 53-56: a collection of documents is a list of documents)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-6, 7-11, 14-15, 18-22, and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Harold et al (Harold et al, "XML in a Nutshell, Second Edition", printed June 2002, pp 171, 378, 383, 398, 431, 438-439, 444-445, 448, and 451-452).

As per dependent claims 2-6, Poole et al fails to specifically disclose creating a schema having a condition element, a choose element, an iterators element, and a functions element. However, Harold et al discloses a condition element (xs:Boolean, Page 398; xs:if, Page 439), choice element (xs:choice, Page 378), iterators element

(xsl:for-each, iterates over the nodes that are identified, Page 438), and a functions element (xsl:import, its function is to import, Page 383).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method with Harold et al's disclosure since it would have provided the user the benefit of supplying the user with information on assigning types to elements and attributes and allowing the user to define custom types.

As per dependent claim 7-11, Poole et al fails to specifically disclose creating a schema having an external interface element that is configured to be resolved into a value, wherein the value is chosen from a group that includes a set, an XML DOM node, and an XML DOM node list, and wherein the external data interface element is configured to have an entity reference attribute and a return type attribute, and having an internal interface and an external interface element.. However, Harold et al discloses an param element (xsl: param, (receives a value) Page 444; xsl:with-param, (sends a value) p451) that sends/receives a named parameter (value) that contain attributes of a name and a select expression. (Page 445, 452) The name represents the parameter's name or entity reference and the select expression that represented to return a value of a particular type. (Page 431) In addition, the retrieved value can be a node-set (p431, 171), a collection of Xpath nodes. (p171) In addition, the xsl:template provides information how data is used including the received value using xsl:param. (p444-445, 448)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method with Harold et al's disclosure since it would have provided the user the benefit of supplying the user with information on assigning types to elements and attributes and allowing the user the ability to retrieve the information from an outside source.

As per independent Claim 14, Claim 14 recites similar limitations as in Claim 1 and is similarly rejected under rationale. Furthermore, Poole et al discloses a method:

- creating a dynamic document structure (FIG 1; Column 1, lines 15-20) that can resolve to one or more instances (FIG 2, Column 5, lines 54-60) using a set of rules. (FIG 1; Column 5, lines 1-24)

Poole et al fails to specifically disclose creating a schema having a condition element, a choose element, an iterators element, and a functions element, and having an external interface element that is configured to be resolved into a value. However, Harold et al discloses a condition element (xs:Boolean, Page 398; xsl:if, Page 439), choice element (xs:choice, Page 378), iterators element (xsl:for-each, iterates over the nodes that are identified, Page 438), and a functions element (xs:import, its function is to import, Page 383). In addition, Harold et al discloses an param element (xsl: param, Page 444; xsl:with-param, p451) that receives a named parameter (value) that contain attributes of a name and a select expression. (Page 445, 452) The name represents the parameter's name or entity reference and the select expression that represented to

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return a value of a particular type. (Page 431) In addition, the retrieved value can be a node-set (p431, 171), a collection of Xpath nodes. (p171)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method with Harold et al's disclosure since it would have provided the user the benefit of supplying the user with information on assigning types to elements and attributes, allowing the user to define custom types and retrieve the information from an outside source.

As per independent Claim 15, Claim 15 recites similar limitations in as in Claim 14 and Claim 12 combined, and is similarly rejected under Poole et al and Harold et al.

As per dependent claims 18-22, Claims 18-22 recite similar limitations as in Claims 2-6, and are similarly rejected under rationale.

As per dependent claims 23-27, Claims 23-27 recite similar limitations as in Claims 7-11, and are similarly rejected under rationale.

Response to Arguments

10. Applicant's arguments filed 21 February 2007 have been fully considered but they are not persuasive.

11. In regards to pages 8-12, in reference to claim 1, Applicant argues Poole et al fails to teach or disclose establishing a software architecture for a set of rules to be embedded in documents wherein the rules define content to be included in the documents. However, Examiner disagrees.

First, Poole discloses a document construction methodology or "architecture" for dynamically constructing electronic and printable documents and forms wherein the document construction is software that may be stored on a storage device. (Column 2, lines 15-16, 41-48; Column 80, lines 22-23) In addition, Column 5, lines 1-24 and FIG 1 discloses the basic document construction that uses certain business, legal, and/or government rules and regulation that specifies the content (e.g. components) for creating a document.

Second, Poole discloses a set of rules embedded in document wherein the rules define content to be included in the documents. According to Poole, as disclosed in Column 5, lines 3-24; Column 7, lines 28-60, the document developer specifics content to be put into the final document in order to meet the objectives of the parties in a transaction and to meet certain business, legal, and/or government rules and regulations. Each of the constituent portions of the document is associated with an entity reference wherein the references are check to make sure they follow all business, legal, and government requirements (rules) which produces content fragments having integrity by virtue of being complaint with one or more business, legal, or government requirements. In other words, content included in the document follow all the required rules implemented that define the content that is to be placed into the document. Furthermore, as stated in Column 5, lines 3-24, and Column 7, lines 37-40, each document component is linked to a business government regulation source, wherein each content of the regulation is incorporated into a final by referencing its corresponding document content. (Col 7, lines 28-60) Since each of the content of the

regulation is incorporated by referencing the document component into the final document, the regulations/rules are embedded into the documents which defines the content in the document.

12. In regard to pages 12-14, Applicant argues Poole does not teach or suggest "creating a dynamic document structure that can resolve to one or more instances of a document and that is configured to include one or more rules based on the architecture for a set of rules." Wherein the Applicant argues that Poole fails to teach or suggest that the resolved components or the documents that will contain the resolved component include embedded rules. However Examiner disagrees.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the resolved components or the documents that will contain the resolved component include embedded rules; wherein the claim limitation doesn't mention the rules are embedded) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Poole et al discloses a dynamic document structure in FIG 1; Col. 1 lines 15-20, whereby dynamically constructing an electronic document for subsequent publication in pre-printed or electronic form. Poole discloses the document construction resolves an instance of a document in FIG 2, Col. 5 lines 54-60 wherein instance contains unresolved entity references. When an entity reference within a reference is resolved, a

new document instance is produced, thus resolving a document instance, Furthermore, Poole et al discloses that the document construction (structure) is configured to include one or more rules.... FIG 1, Column 5, lines 1-24 discloses Poole's document construction includes business, legal and/or government rules and regulation that specifies the content used in the document. Since these rules govern the content placed into the document, the rules are included in the document construction process.

13. In regards to pages 14-15, in reference to Claim 16, Applicant argues Poole clearly does not teach or suggest "retrieving one or more cross-referenced document components from a data base based on the transaction data set, the one or more document components configured to include one or more embedded rules, the one or more rules defining content to be included in the document.." However, Examiner disagrees. Column 7, lines 31-40 discloses a document may be defined from text and graphical components accessed from a Knowledge base. In addition, the Knowledge Base includes rules being stored. (Column 6, lines 15-30) Each of the constituent portions of the document is associated with an entity reference wherein the references are check to make sure they follow all business, legal, and government requirements (rules) which produces content fragments having integrity by virtue of being complaint with one or more business, legal, or government requirements. In other words, content included in the document follow all the required rules implemented that define the content that is to be placed into the document. Furthermore, as stated in Column 5, lines 3-24, and Column 7, lines 37-40, each document component is linked to a

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business government regulation source, wherein each content of the regulation is incorporated into a final by referencing its corresponding document content. (Col 7, lines 28-60) Since each of the content of the regulation is incorporated by referencing the document component into the final document, the regulations/rules are embedded into the documents which defines the content in the document.

14. Furthermore, arguments to Claims 14 and 15 recite similar arguments to Claim 1 and are in view in rationale as the response to the argument of Claim 1 disclosed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Faber
Patent Examiner
AU 2178

Handwritten initials "DF" in a stylized, cursive font.Handwritten signature of Stephen Hong in a cursive font.

STEPHEN HONG
SUPERVISORY PATENT EXAMINER